

RECORDING

D I G I T A L A U D I O

TECHNOLOGY



“ The **definitive**
A/D converter for music
recording ”

“ record at 96kHz 24-bit and
simultaneously use the auxiliary
output at 44.1kHz to make a
16-bit DAT ”

“ synchronization flexibility, with
Prism Sound's unique
high-order jitter rejection ”

“ a **one-box** solution
with integrated **sampling-rate conversion,**
format conversion and **noise shaping** ”

“ Dependable,
compatible performance
for years to come ”

Prism Sound

AD-2

ANALOGUE TO DIGITAL
CONVERTER AND PROCESSOR

The A/D conversion of musical signals is the key stage in the digital recording chain. Care and attention at this stage will pay dividends right through the production process and on to the listener.

But in today's rapidly-changing media industry, it can be difficult to identify the right way forward for recording facilities. As a result, investment in new technology is inevitably linked with concern about recording formats and future compatibility.

The Dream AD-2 is the definitive music A/D converter, providing the most accurate rendition of an audio event whether it be early music, classical, jazz, big band, a club mix or the hardest of hard rock.

The AD-2 conversion system provides an audio stream of such exceptional quality that it will be relied upon for years to come as the definitive source for productions on CD, DVD, Super Audio CD or other formats as they become available.

Furthermore, the AD-2 includes the other essential tools needed for audio production on the formats that will mark the arrival of the next millenium, without which the performances so carefully captured would never be properly revealed.

Prism Sound have been at the forefront of high-quality professional audio for a decade and have contributed widely to the body of knowledge available in the industry, especially in topics such as jitter, conversion quality, signal processing, test and measurement.

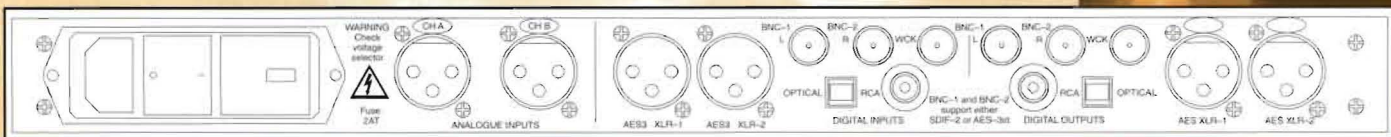
AD-1 2 4

DA-1

AD-2

DA-2

DREAM AD-2 ANALOGUE TO DIGITAL CONVERTER AND PROCESSOR



MAKE A 96kHz RECORDING AND A DAT FROM THE SAME A/D

The AD-2 provides two independent output channels which can run with different sample-rates, wordlengths, noise-shaping and dither schemes and interface formats.

EASY TRANSFER BETWEEN TAPE AND DISK

AD-2 supports all popular interface formats including the new two-wire and double-speed AES variants for higher-rate-sampling (HRS : e.g. 96kHz) recording. The AD-2 can perform format conversion for transfer between devices with different interfaces. For example, the AD-2 can convert 96kHz two-wire to 96kHz double speed AES or between AES3 and S/PDIF or SDIF-2.

BUILT-IN PEAK METER

The AD-2 incorporates a digital peak meter complemented by a precision digital level readout in the LCD display. With a switchable 'hold' function these facilities eliminate the need for a separate meter.

MAKE A HIGH-RESOLUTION RECORDING USING A 16-BIT RECORDER

The AD-2 provides two methods of recording at higher-resolution on 16-bit recorders. Suitable for 96kHz or 44.1/48 kHz sampling, the Prism Sound DRE system extends dynamic range of the format, subject to decoding using the built-in DRE decoder. Alternatively, noise-shaping can be used. Prism Sound Super-Noise-Shaping (SNS) can place the quantization noise energy at high frequencies so rendering the noise inaudible. A range of different SNS curves are provided, offering varying degrees of subjective noise reduction.

Note: For economical 24-bit 96kHz recording the Prism Sound MR2024T interface adaptor enables use of the TASCAM DA-88 family.

WORK WITH A WIDE VARIETY OF SYNCHRONIZATION SOURCES FOR CD, VIDEO OR DVD POST PRODUCTION

The AD-2 can lock to AES, S/PDIF or Wordclock sync at any standard sampling rate and simultaneously generate two other A/D output sampling-rates.

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REDUCTION TO COMPACT DISC (CD) BIT-RATES WITH MINIMAL LOSS OF QUALITY AND DETAIL

The AD-2 provides synchronous sampling-rate conversion, wordlength reduction and interface format conversion in one box, so avoiding the inconvenience and expense of separate processor or conversion units.

- Built-in sampling-rate converter with digital input and output capability
- Support for 2-wire and double-speed AES interfaces for higher-rate sampling (HRS), including conversions between the two
- Support for the most popular interface formats (AES/Toslink optical, S/PDIF and SDIF-2).
- Integral SNS noise-shaping system for word-length reduction

The AD-2 allows simultaneous (or independent) wordlength reduction from 24 to 16 bits with a choice from a variety of Prism Sound SNS noise-shaping curves.

Note: Recordings processed using SNS noise-shaping are fully compatible with all domestic CD and DVD players and will yield exceptional results. Best results will be obtained when listening with higher-specification D/A converters such as the Prism Sound Dream series DA-1 and DA-2 converters.

EASY TO USE IN A VARIETY OF SITUATIONS

The AD-2 provides a Set-up Wizard feature, eight factory preset configurations and a further eight user-configurable presets to complement the menu system. This makes light work of harnessing the immense power of the AD-2. Settings are displayed on dedicated LED displays and so are visible at all times.

The AD-2 allows headroom and gain trim via the menu system and these can be set by the user presets if desired. This is useful when using different types of source, such as a microphone amplifier or a recording console.

ASK FOR A DEMONSTRATION

Call us now for details of your nearest distributor and ask for an on-site demonstration. For further technical information, phone or fax Prism Sound or e-mail sales@prismsound.com.



A/D CONVERTER SPECIFICATIONS

Full Scale input signal level : +5dBu to +28dBu in steps at 0.5dB or 0.05dB

Differential input impedance : 20k Ω

Common mode voltage range : 70V

Dynamic range : 130dB unweighted RMS

High-level THD+n : < -104dB unweighted RMS

Intermodulation distortion : < -90dB

Spurious harmonics : < -130dBFS

CMRR : > 90dB @ 50Hz, 80dB @ 15kHz

Crosstalk : < -130dB @ 50Hz,

< -140dB @ 15kHz

Level dependent linearity : < < 3dB at -144dBFS

SAMPLE RATES : 32, 44.1, 48, 88.2, 96kHz $\pm 0.15\%$

JITTER

Attenuation slope : 80dB/decade

Corner frequency : approx. 80Hz

Attenuation above 500Hz : greater than 60dB

Intrinsic : less than 18 picoseconds RMS

SAMPLE-RATE CONVERSION (96kHz to 44.1kHz) :

Dynamic range : 140dB*

High-level THD+n : -135 dB (0.00003%)

Max. spurious level : -157 dB*

*unweighted RMS

INTERFACES

Digital Inputs and Outputs

XLR1 and XLR2 : AES/EBU 110 Ω Both support

HRS (e.g. 96kHz) double speed or two-wire

BNC 1 and BNC 2 : AES3-id 75 Ω Both support

HRS double speed or two-wire and

SDIF-2 at high and low rates

Toslink Optical : S/PDIF high and low rates

RCA/Phono : S/PDIF high and low rates

POWER

External selector for : 90-110V, 110-30V,

190-220V, 220-260V. Consumption : 30W

DIMENSIONS

Height : 1 rack unit (44mm)

Width : 19-inch rack (438mm)

Depth : 10.25 inches (260mm)

Weight : 8.8lb (4kg)